NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offi-Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

EXAMINER 45372 759n 05/13/2009 BAHTA, KIDEST MARSHALL, GERSTEIN & BORUN LLP (FISHER) 233 SOUTH WACKER DRIVE ARTHNIT 6300 SEARS TOWER

PAPER NUMBER

DATE MAILED: 05/13/2009

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 10/595.116 04/04/2006 Kenneth W. Junk 06005/561655 2869

TITLE OF INVENTION: LEAD-LAG INPUT FILTER ARRANGEMENT FOR ELECTRO-PNEUMATIC CONTROL LOOPS

APPLN, TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$1810 08/13/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

CHICAGO, IL 60606

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless correcte maintenance fee notificat	correspondence includired below or directed oth	or transmitting the ISS ig the Patent, advance of nerwise in Block 1, by	orders and notification of a (a) specifying a new corre	naintenance fees wi spondence address;	ed). Blocks I throu II be mailed to the and/or (b) indicating	igh 5 sho current c g a separa	orrespondence address as ite "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
233 SOUTH WA 6300 SEARS TO	GERSTEIN & BO ACKER DRIVE OWER	^{v2009} DRUN LLP (FISH	IER) The	Certify that this	ificate of Mailing or	r Transm	
CHICAGO, IL 6	0606						(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	:	ATTORNEY DOCKE	ΓNO.	CONFIRMATION NO.
10/595,116	04/04/2006		Kenneth W. Junk		06005/561655		2869
			NT FOR ELECTRO-PNEU				T
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE	(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$181	0	08/13/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
BAHTA,		2123	700-001000				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	inge of Correspondence "Indication form led. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternati (2) the name of a sing- registered attorney or 2 registered patent atte- listed, no name will be THE PATENT (print or ty	o 3 registered patent vely, le firm (having as a agent) and the name meys or agents. If n printed.	attorneys I member a 2 s of up to o name is 3		
PLEASE NOTE: Uni recordation as set forti (A) NAME OF ASSIC	SNEE		e data will appear on the p OT a substitute for filing an (B) RESIDENCE: (CIT')	and STATE OR CO	OUNTRY)		pentity Government
4a. The following fee(s) a	are submitted:	4	th. Payment of Fee(s): (Ples A check is enclosed. Payment by credit ca The Director is hereby overpayment, to Depo	ase first reapply any	previously paid is is attached. e the required fee(s)	sue fee sh	nown above)
	s SMALL ENTITY state	as. See 37 CFR 1.27.	☐ b. Applicant is no lon				
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be accept ites Patent and Trademar	ed from anyone other than k Office.	the applicant; a regis	tered attorney or ago	nt; or the	assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration No			
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	CFR 1.311. The informat U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to to O NOT SEND FEES OR	ion is required to obtain or k 1.14. This collection is es y depending upon the indi- the Chief Information Offic COMPLETED FORMS T	retain a benefit by th timated to take 12 m vidual case. Any cor er, U.S. Patent and T O THIS ADDRESS.	e public which is to inutes to complete, nments on the amou 'rademark Office, U SEND TO: Commi	file (and l including int of time .S. Depar ssioner fo	by the USPTO to process) gathering, preparing, and e you require to complete tment of Commerce, P.O. r Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

s: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 05/13/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/595,116	04/04/2006	Kenneth W. Junk	06005/561655	2869	
45372	7590 05/13/2009		EXAMINER		
MARSHALL, GERSTEIN & BORUN LLP (FISHER)			BAHTA, KIDEST		
233 SOUTH WA		, ,	ART UNIT	PAPER NUMBER	
6300 SEARS TO CHICAGO, IL 60			2123		

Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/595,116 JUNK ET AL. Notice of Allowability Examiner Art Unit KIDEST BAHTA 2123 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS ative

NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiof the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
1. ☑ This communication is responsive to <u>4/29/09</u> .
2. ☑ The allowed claim(s) is/are <u>1-20 and 38-42</u> .
3.
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

1. Notice of References Cited (PTO-892)

Attachment(s)

- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date
- 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material

П	Notice	of In	formal	Patent	Application	

- 6. Interview Summary (PTO-413), Paper No./Mail Date
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other _____.

Application/Control Number: 10/595,116

Art Unit: 2123

Allowable Subject Matter

Claims 21-34 and 38-42 are allowed.

The following is an examiner's statement of reasons for allowance:

The terminal disclaimer filed on 7/20/08 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US patent 7,349,745 has been reviewed and is accepted. The terminal disclaimer has been recorded.

The allowability of the independent claim 21 resides, at least in part, in that closest prior art of record Boger et al. (US 6,453,261) does not disclose or suggest, alone or in combination, a control valve actuation stage in communication with the amplifier, the control valve actuation stage comprising at least a current-to-pressure transducer and a pneumatic relay in communication with the current-to-pressure transducer, the control valve actuation stage further including at least one of a group of a quick exhaust valve and a volume booster in pneumatic communication with the current-to-pressure transducer, in combination with the other elements and features of the claimed invention.

The allowablility of the independent claim 38 resides, at least in part, in that closest prior art of record Boger et al. (US 6,453,261) does not disclose or suggest, alone or in combination, a lead-lag input filter in communication with the logical process; a user interface in operable communication with the lead-lag input filter, the user interface in communication with a processor, a display, an input device, and a routine adapted to display a graphical representation of at least one adjustable control on the display, the

Art Unit: 2123

routine further adapted to display an alteration in the graphical representation of the at least one adjustable control in response to a manipulation of the input device and the processor is adapted to signal a change in output of the lead-lag input filter corresponding to the manipulation of the input device, and wherein the change in output of the lead-lag filter alters the at least one adjustable process parameter within the logical process, in combination with the other elements and features of the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed Kidest Bahta whose telephone number is 571-272-3737. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/595,116 Page 4

Art Unit: 2123

Information regarding the status of an application may be obtained from the Patent Application information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAG system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-fee).

/Kidest Bahta/

Primary Examiner, Art Unit 2123